UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

27346

7500

03/11/2008

LERNER GREENBERG STEMER LLP FOR INFINEON TECHNOLOGIES AG P.O. BOX 2480 HOLLYWOOD, FL 33022-2480

EXAMINER				
GRAHAM, KRETELIA				
ART UNIT	PAPER NUMBER			
2025				

DATE MAILED: 03/11/2008

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO.

10/642,856 08/18/2003 Martin Freitag MUH-12720 3363

TITLE OF INVENTION: METHOD FOR WRITING TO MAGNETORESISTIVE MEMORY CELLS AND MAGNETORESISTIVE MEMORY WHICH CAN BE WRITTEN TO BY THE METHOD

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	06/11/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where m

appropriate. All further indicated unless correct maintenance fee notifica	correspondence including delayed or directed off tions.	ng the Patent, advance onerwise in Block 1, by (rders and notification of a) specifying a new corr	maintenance fees espondence address	will be ; and/or	mailed to the current r (b) indicating a sepa	correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)			Fe pa	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
27346	7590 03/11	/2008	na			e of Mailing or Trans	miccion
FOR INFINEON P.O. BOX 2480			I h St: ad tra	nereby certify that that extract the detection of the detection of the Mainsmitted to the USI	nis Fee(with suf Il Stop TO (57	s) Transmittal is being ficient postage for firs ISSUE FEE address 1) 273-2885, on the definition of the desired for the desir	deposited with the United t class mail in an envelope above, or being facsimile te indicated below.
HOLLYWOOD	, FL 33022-2480						(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	R	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/642,856	08/18/2003	•	Martin Freitag		•	MUH-12720	3363
TITLE OF INVENTION CAN BE WRITTEN TO		TING TO MAGNETOR	ESISTIVE MEMORY C	ELLS AND MAG	NETOR	ESISTIVE MEMORY	WHICH
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	JE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0		\$1740	06/11/2008
EXAM	IINER	ART UNIT	CLASS-SUBCLASS				
GRAHAM,	KRETELIA	2827	365-158000				
 Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON TH 			or agents OR, alterna (2) the name of a sin registered attorney or 2 registered patent at listed, no name will b	ames of up to 3 registered patent attorneys OR, alternatively, ame of a single firm (having as a member a d attorney or agent) and the names of up to red patent attorneys or agents. If no name is o name will be printed.			
PLEASE NOTE: Unl recordation as set fort (A) NAME OF ASSIG	less an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assignee pletion of this form is NO	data will appear on the T a substitute for filing a (B) RESIDENCE: (CIT	patent. If an assign n assignment. 'Y and STATE OR	COUNT	TRY)	ocument has been filed for
Please check the appropr	riate assignee category or	categories (will not be pa	rinted on the patent):	Individual 🗖 C	orporati	on or other private gro	up entity 🔲 Government
4a. The following fee(s) are submitted: ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
5. Change in Entity Sta	tus (from status indicated as SMALL ENTITY state		☐ b. Applicant is no lo	ngar alaiming SMA	II EN	PITV status See 27 CI	FR 1 27(a)(2)
NOTE: The Issue Fee an	d Publication Fee (if rea	uired) will not be accepte	d from anyone other than				e assignee or other party in
interest as shown by the	records of the United Sta	tes Patent and Trademark	COffice.				
Authorized Signature				Date			
				_			
This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 d application form to the ions for reducing this bu. Virginia 22313-1450. DC	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the O NOT SEND FEES OR	on is required to obtain on 1.14. This collection is e depending upon the ind the Chief Information Offic COMPLETED FORMS	retain a benefit by stimated to take 12 ividual case. Any c cer, U.S. Patent and TO THIS ADDRES	the publiminutes omment Traden S. SEN	lic which is to file (and s to complete, includin is on the amount of tir nark Office, U.S. Depa D TO: Commissioner	by the USPTO to process) g gathering, preparing, and me you require to complete utment of Commerce, P.O. For Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,856	08/18/2003	Martin Freitag	MUH-12720	3363
27346 75	590 03/11/2008		EXAM	INER
LERNER GREE	NBERG STEMER L	GRAHAM, KRETELIA		
	TECHNOLOGIES AG		ART UNIT	PAPER NUMBER
P.O. BOX 2480 HOLLYWOOD, FL 33022-2480			2827 DATE MAILED: 03/11/200	8

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 579 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 579 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	A P C NI	A I' (t -)			
	Application No.	Applicant(s)			
Notice of Allowability	10/642,856	FREITAG ET AL.			
Notice of Allowability	Examiner	Art Unit			
	KRETELIA GRAHAM	2827			
The MAILING DATE of this communication appeal All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in this ap or other appropriate communication IGHTS. This application is subject to	plication. If not included n will be mailed in due course. THIS			
1. 🔀 This communication is responsive to the request for contin	ued examination filed 1/11/08.				
2. ☑ The allowed claim(s) is/are <u>1,2 and 4-7</u> .					
 3. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 	been received.				
3. Copies of the certified copies of the priority do	cuments have been received in this	national stage application from the			
International Bureau (PCT Rule 17.2(a)).					
* Certified copies not received:					
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be subm	IENT of this application.				
INFORMAL PATENT APPLICATION (PTO-152) which give					
5. \boxtimes CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.				
(a) \square including changes required by the Notice of Draftspers	on's Patent Drawing Review (PTO-	-948) attached			
1) ☐ hereto or 2) ☐ to Paper No./Mail Date					
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 20080228.					
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t					
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.					
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5. ☐ Notice of Informal F	Patent Application			
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Summary	• •			
3. ☐ Information Disclosure Statements (PTO/SB/08),	Paper No./Mail Da 7.	te			
Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛛 Examiner's Stateme	ent of Reasons for Allowance			
-	9.				
	/Huan Hoang/ Primary Examiner, Art Unit	: 2827			

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, filed 12/7/07, with respect to the objection to the claims and rejection of the claims have been fully considered and are persuasive. The objection/rejection has been withdrawn.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, rotating the magnetization direction in three first steps for writing logic "0" (see claims 1 and 4) must be shown or the feature(s) canceled from the claim(s). **Note: Fig. 3a-3h only shows** the rotation steps necessary to write a logic "1" and not a logic "0". No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

Application/Control Number: 10/642,856 Page 3

Art Unit: 2827

consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Allowable Subject Matter

3. Claims 1, 2, and 4-7 are allowed. The following is an examiner's statement of reasons for allowance: the prior art of record considered pertinent to the Applicant's disclosure, whether taken individually or in combination, does not teach or suggest: controlling the timings of impressing the word line current and bit line current to be offset to one another by a switching duration of the word line current for rotating the magnetization direction of the soft magnetic layer in three successful angular displacement steps; wherein for writing a logic "0" the magnetization direction is rotated in three first steps in a first angular direction, and for writing a logic "1" the magnetization direction is rotated in three second steps in a second inverse direction (see claims 1 and 4)

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KRETELIA GRAHAM whose telephone number is (571)272-5055. The examiner can normally be reached on Mon-Fri 8am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on (571) 272-1852. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Huan Hoang/ Primary Examiner, Art Unit 2827

/Kretelia Graham/ Examiner, Art Unit 2827 Application/Control Number: 10/642,856 Page 5

Art Unit: 2827